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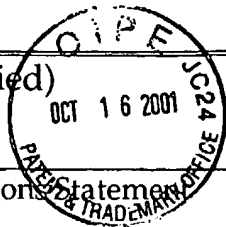
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<b>Form PTO-1449 (Modified)</b>		<b>Atty Docket No.:</b> 5543P005	<b>Serial No.:</b> 09/844,857
List of Patents and Publications (Use several sheets if necessary)		<b>Applicants:</b> J.J. Garcia-Luna-Aceves <b>Filing Date:</b> April 26, 2001	



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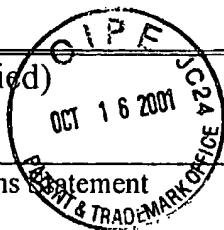
REFERENCE DESIGNATION				U.S. PATENT DOCUMENTS			
Exam. Initial	Date	Document Number	Name	Class	Sub-Class	Filing Date	
MAS	12/14/99	6,003,030	Kenner et al.				
	1/30/01	6,182,224	Phillips et al.				
	8/22/00	6,108,703	Leighton et al.				
MAS	4/18/00	6,052,718	Gifford				

FOREIGN PATENT DOCUMENTS							
No.	Document No.	Date	Country	Name	Class	Sub-Class	Translation

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
MAS	A. Chankunthod, P. Danzig, C. Neerdaels, M. Schwartz, and K. Worrell, "A Hierarchical Internet Object Cache," Proc. USENIX Technical Conference 96, San Diego, California, January 1996
	A. Duda and M.A. Sheldon, "Content Routing in Networks of WAIS Servers," Proc. IEEE 14th International Conference on Distributed Computing Systems, June 1994
	A. Duda and M.A. Sheldon, A. Duda, R. Weiss, J.W. O'Toole, Jr., and D.K. Gifford, "A Content Routing System for Distributed Information Servers," Proc. Fourth International Conference on Extending Database Technology, March 1994
	A. Heddaya and S. Mirad, "WebWave: Globally Load Balanced Fully Distributed Caching of Hot Published Documents," Technical Report BU-CS-96-024, Boston University, Computer Science Department, October 1996
	P. Rodriguez, E.W. Biersack, and K.W. Ross, "Improving The Latency in The Web: Caching or Multicast?," Proc. Third WWW caching workshop, Manchester, UK, June 1998
	D. Karger, E. Lehman, T. Leighton, M. Levine, D. Lewin, and R. Panigraphy, "Consistent Hashing and Random Trees: Distributed Caching Protocols for Relieving Hot Spots on the World Wide Web," Proc. 29th ACM Symposium on Theory of Computing (STOC 97), El Paso, Texas, 1997
	D. Karger, Sherman A. Berkheimer, B. Bogstad, R. Dhanidina, K. Iwamoto, B. Kim, L. Matkins, and Y. Yerushalmi, "Web Caching with Consistent Hashing," Proc. 8th International World Wide Web Conference, Toronto, Canada, May 1999
MAS	D. Small and W.W. Chu, "A Distributed Data Base Architecture for Data Processing in a Dynamic Environment," Proc. COMPCON 79 Spring

<b>Examiner</b> M. A. Siddiqui	<b>Date Considered</b> 7/17/04
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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FOREIGN PATENT DOCUMENTS								
No.		Document No.	Date	Country	Name	Class	Sub-Class	Translation

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
mas	D. Wessels and K. Claffy, "Internet Cache Protocol (ICP), Version 2, RFC 2186, September 1997
	D. Wessels, " Squid Internet Object Cache," <a href="http://www.squid.org">http://www.squid.org</a> , August 1998
	D.G. Thaler and C.V. Ravishankar, "Using Name Based Mappings To Increase Hit," IEEE/ACM Trans. Networking, 1998
	G. Chiu, C.S. Rahgavendra, and S.M. Ng, " Resource Allocation with Load Balancing Consideration in Distributed Computing Systems, " Proc. IEEE INFOCOM 89, Ottawa, Ontario, Canada, April 1989, pp. 758-765
	H.L. Morgan and K.D. Levin, "Optimal Program and Data Location in Computer Networks," Communications of the ACM, Vol. 20, No. 5, May 1977
	J.D. Guyon and M.F. Schwartz, " Locating Nearby Copies of Replicated Internet Servers," Technical Report CU-CS-762-95, Department of Computer Science, University of Colorado- Boulder, February 1995
	K.W. Ross, " Hash Routing for Collections of Shared Web Caches," IEEE Network, Vol. 1, No. 6, November 1997, pp. 37-44
	L. Zhang, S. Michel, S. Floyd, and V. Jacobson, "Adaptive Web Caching: Towards a New Global Caching Architecture," Proc. Third International WWW Caching Workshop, Manchester, England, June 1998
	B.S. Michel, K. Nikoloudakis, P. Reiher, and L. Zhang, "URL Forwarding and Compression in Adaptive Web Caching," Proc. IEEE Infocom 2000, Tel Aviv, Israel, April 2000
mas	M.A. Sheldon, A. Duda, R. Weiss, J.W. O'Toole, Jr., and D.K. Gifford, "A Content Routing System for Distributed Information Servers," Proc. Fourth International Conference on Extending Database Technology, March 1994

Examiner <i>M. Asadpour</i>	Date Considered <i>7/19/2004</i>
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List of Patents and Publications Submitted (Use several sheets if necessary)				<b>Applicants:</b> J.J. Garcia-Luna-Aceves			
				<b>Filing Date:</b> April 26, 2001			
<b>REFERENCE DESIGNATION</b>				<b>U.S. PATENT DOCUMENTS</b>			
<b>Exam. Initial</b>		<b>Date</b>	<b>Document Number</b>	<b>Name</b>	<b>Class</b>	<b>Sub-Class</b>	<b>Filing Date</b>
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<b>No.</b>		<b>Document No.</b>	<b>Date</b>	<b>Country</b>	<b>Name</b>	<b>Class</b>	<b>Sub-Class</b>
<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
MAS		P. Rodriguez and E.W. Briesack, "Continuous Multicast Push of Web Documents over The Internet," IEEE Network Magazine, Vol. 12, No. 2, pp. 18-31, 1998					
		Proc. ACM SIGCOMM 95 Conference, Cambridge, Massachusetts, August 1995, pp. 288-298					
		R. Tewari, M. Dahlin, H.M. Vin and J.S. Kay, "Design Considerations for Distributed Caching on the Internet," Proc. IEEE 19th International Conference on Distributed Computing Systems, May 1999					
		S. Mahmoud and J.S. Riordon, "Optimal Allocation of Resources in Distributed Information Networks," ACM Transactions on Data Base Systems, Vol. 1, No. 1, March, 1976					
		T. Berners-Lee, "Information Management: A Proposal," CERN Document, March 1989					
		W.W. Chu, "Optimal File Allocation in a Multiple Computer System," IEEE Transactions on Computers, October 1969					
		W.W. Chu, "Performance of File Directory Systems for Data Bases in Star and Distributed Networks," Proc. National Computer Conference, 1976, pp. 577-587					
		Z. Fei, S. Bhattacharjee, E.W. Zegura, and H.M. Ammar, "A Novel Server Selection Technique for Improving The Response Time of a Replicated Service," Proc. IEEE Infocom 98, March 1998, pp. 783-791					
		R. Tewari, "Architectures and Algorithms for Scalable Wide-area Information Systems," Ph.D. Dissertation, Chapter 5, Computer Science Department, University of Texas at Austin, August 1998					
		<a href="http://www.nlar.net/Cache/ICP/draft-vinod-icp-traffic-dist-00.txt">http://www.nlar.net/Cache/ICP/draft-vinod-icp-traffic-dist-00.txt</a> , September 10, 2001					
		<a href="http://www.cache.ja.net/events/workshop/papers.html">http://www.cache.ja.net/events/workshop/papers.html</a> , October 3, 2001					
MAS		<a href="http://www.cs.utexas.edu/users/UTCS/techreports/">http://www.cs.utexas.edu/users/UTCS/techreports/</a> , September 10, 2001					

<b>Examiner</b> M. A. Siddiqui	<b>Date Considered</b> 7/19/2004
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				Application Number	09/844,857
				Filing Date	April 26, 2001
				First Named Inventor	J.J. Garcia-Luna-Aceves
				Group Art Unit	2152
				Examiner Name	Not yet assigned
				Attorney Docket Number	5543P005
Sheet	1	of	2		

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

Application Number	09/844,857
Filing Date	April 26, 2001
First Named Inventor	J.J. Garcia-Luna-Aceves
Group Art Unit	2152
Examiner Name	Not yet assigned
Attorney Docket Number	5543P005

Sheet	2	of	2
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**OTHER ART - NON PATENT LITERATURE DOCUMENTS**

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